

<210> 409
<211> 250
<212> DNA
<213> *Homo sapiens*

<220>
<221> misc_feature
<222> (1)...(250)
<223> n = A, T, C or G

<210> 410
<211> 306
<212> DNA
<213> *Homo sapiens*

<220>
<221> misc_feature
<222> (1)...(306)
<223> n = A,T,C or G

<210> 411
<211> 261
<213> DNA
<213> *Homo sapiens*

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<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A, T, C or G
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<400> 411
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ggatcttttg tattttatggg ttctcgatgg ttgtcttggac aggtttatgtat aaggctgttc 120
tttaaatgtc tggaaatggaa cagatttccaa aaaaaaaaccc cacaatctatg ggttggaaaca 180
aggaaaggggaa gatgttgaata ggtgtatggg cccaaaaacccca atttacccat cagtccacgg 240
cttcttccaa cggccggccaa a 261
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<210> 432

<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...(241)
<223> n = A,T,C or G

<400> 412
gttcaatgtt aactgaaattt ttacaaacac cccactcaac gatgtatcg ttgcccagt 60
ggaaatccatc aegctgaaat tggaaaaaat aattgtgtt cttgcccagg aataactaa 120
actgactttt atggatccac aaacatcaaoc cagtgtaaaa acagaatgtt tgaggggag 180
ctggggaggat tcaactgggtt cattgaattc cccaaactacc cangcaatta cccagccac 240
a 241

<210> 413
<211> 231
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...(231)
<223> n = A,T,C or G

<400> 413
aacttattaca atccaaagtga ctatctgtt tgcttgaatc ctttccactg ttcataatcc 60
cttacatccatc ttctatgtt cttcttctttt tggtaagggta taatccaaact gaacaacaaa 120
aactttatcc ttccttattt gaaacctaaaaa actcttcttct ttcctgggtt gagggtccaa 180
agaatccctt aatccatcttctt cagatccattt gggacacccat atcaggaaacc t 231

<210> 414
<211> 234
<212> DNA
<213> Homo sapiens

<400> 414
actgtccatg aagcacttgg cagaagctgg aggcacaacg cccacaccc tcacagccag 60
gtggggatgt aaaaatccatcc cccatcttgc ctggggccac tggggatgtt agagaaggct 120
ctggacccatc ggggggggtt cttcttttttggatggatggatggatgtt aaggagggaa 180
ctggacccatc tggaaatgtt ttcactatgg ggggggggtt atggatgttcc 234

<210> 415
<211> 217
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...(217)
<223> n = A,T,C or G

<400> 415
gcataggatt aagactggat atcttttctt catttttttta acttttcaag gggcacttct 60
ccaaacacac accggatgtc aatctccac tctcttcaagg ntctcaccac cacttttctca 120
caccatggatca tagtagaatt cagtcctact tctggggccaa gaagaaatgtt tcaatggatgtt 180
antggatgtt aaaaaatccatc aatccatccatc 217

<210> 423
<211> 310
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> (1)...(310)
<223> n = A,T,C or G
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<210> 424
<211> 370
<212> DNA
<213> *Homo sapiens*

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A, T, C or G

<210> 425
<211> 216
<212> DNA
<213> *Homo sapiens*

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<220>
<221> misc_feature
<222> (i)...(216)
<223> n = A,T,C or G
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<400> 425
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taacaacmna acatcaaggm aaaaanhaaca ggaatggntg actntgcata atngccgca 120
anattatcoca ttatnttaag ygttgcattg actgttgcac aggttacgac acacagacaa acatgcocca 180
aaccmtnca aaccccttca ttatnttttg aqggagg 216
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<210> 426
<211> 596
<212> DNA
<213> *Homo sapiens*

52102 637

卷之三

52122 DNA

<213> *Homo sapiens*

400 > 437

<210> 438

5211 360

<212> DNA

<213> Homo sapiens

<400> 433

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ctgtttatca caatgtatgt ttctttgtggc acgttgtgtgat ttcttgcacat ctgtgtatc 50
ttatgtatgtc ctatgtatgtc tttcataatctt atgtggggat ttcaggaga ttcaacagg 120
atgttttctac acgtttgtgtt tatgtacaaacaa acaaatgtccaa aagaatcttc aagaaggagg 180
actgtcaatgtt atatctgtgtgg aaaaaggaaaggc cccaaaaaaaggc acctgttctgtc tcaatgtatc 240
gataatctaa tttgtgttataa ttgtggacatc ggctccaaaggc ccaggcttca ttcttcctct 300
cccttcaataa ttgtcaataat tttgtgtatc gctatgtatc aaaaaggat tttggacaaatc 360

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42102 439

<211> 433

<232> DNP

213 Homo sapiens

<220>

<221> misc_fe

<222> {33}...{431}

<223> n = A, T, C or G

<400> 439

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<219> 440

2112 523

<212> DNA

<213> *Homo sapiens*

<400> 440

210 443

<211> 430

<212> DNA

<213> *Homo sapiens*

<400> 441

<210> 442

2112 362

<212> DMR

<213> *Homo sapiens*

<400> 442

52102 663

524

<212> DNA

<313> *Homo sapiens*


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<210> 449
<211> 706
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...{(706}
<223> n = A,T,C or G

<400> 449
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ttctganeac cggaaatggc atggcaggcc tggccatgtt cctccatggc tcctatgtc 120
ctggagggc aggtgttc tag tcagagatc gtcctggaaag gttggccttc agggggca 180
ggggacgc atctcgcaaa tggggggggg gttccatctt gecatccgg ctggcaact 240
gttggaaaggc gggatgggtt cggggctttt cggatattacg ccaggtgggg aaaaaggggat 300
gtgtgtcaaggc gogatgtttt tgggttaacggc cagggttttc ccaatccggc cttgttaaaa 360
ccggccggc agtattatggat tttgtgtacm cttatggaaatc gctatggatc cggatgtggc 420
cgatcgaaat ctggatgtttt ctggggccgc cggctactac tactaaatc gggccggat 480
cgaaatggggc tttccatctt gggatgggg agttggatgtt gttggacntt gtcatgggg 540
cactggggc asgtggggg cacaacggcc cggccactca cagctactca gggggctgg 600
aacagggttgc acctggggg tgggggttc atggatgttgc gttcggggcc ctggccccc 660
gtcatggatgc cagatgttgc ctccatctttt aaaaaaaaaa aaaaaa 706

<210> 450
<211> 493
<212> DNA
<213> Homo sapiens

<400> 450
gaggggggtt gtcactctgt tggccgggtt gggatgtggggc aaggaaatgtt ctggaaaaaa 60
aaatgtttttt aaggtaaaaaa aatcataaaaaa gaaatataatctt atatgtggaaa taatggatgtc 120
aaatggggctt gagaactttt caaaagggttc ttacagatcc ttccggccatc ttatgtccat 180
acgttcaatgtt taatggaaaccc ttgggggggg aatccatccat ttgtacatgtt ggtatccatc 240
caatgtccatgtt aatggaaatgg tggggatattt aatccatattt attcgtccatc ctggaaatggc 300
agagacactgtt tcaatgtgggtt aaaaatgggg tttttatccatc ggggtgttttccatc 360
tcaatgtcaatc acatctgttgc atccacacgc caatgtttca aaccactgtt cttatgttgc 420
tacatcatcg aatccatcttgg agatgtttac aatccatccat tggccgggggtt cggccggcc 480
gogaattttag tag 493

<210> 451
<211> 501
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...{(501}
<223> n = A,T,C or G

<400> 451
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cttcgttca ttacggccacg tggggaaaagg gggatgtgtt gcaaggccat taatgtgggtt 120
aaccggccaggc ttttcccccggt cncggccgtt taaaacccggc gcccgttcat taatgtttgg 180
tgcacatataa gaaaggatcat gaaatgttgcat gcaatggccat gtaatgtttgg atccatcttgc 240
ggggccggccat actactctca aatccatggggc cgggtggccat tgggtatccgc actggaaatgg 300
tggatggatgttgc catgtgttgc acatctgttca tggaaatggcc agggaaatgtt gggggccatc 360
cccccacccatc acatccatgttgc acatccatggggc ctggggccatc gttggacatcc gggatgtgggg 420

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<212> DNA
<213> Homo sapiens

<400> 455

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ttccatccatg tattatcgtt attatcttgg gagaacacot gtcgtttttc tggtaaccctt 120
tgcactcaaa ttccctttatc aggaataact acatagccac tatttaaaaa gocatggaa 180
ccctttttttt tggtgccatg gcttagtcgtt cccctgactga cattgccaag t 231

<210> 457

<211> 231

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(231)

<223> n = A,T,C or G

<400> 457

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gcatttccta stgtgtatc gctatcattt gatttttctc cattagatc tatacagttt 120
tatttgcattt tatttagcaat ctcttbeaga agaccccttga gatcattaaat ctttgatcc 180
agttgtctaa atcgatgcctt catttccctt gaggtgtccg tgggttttgtt g 231

<210> 458

<211> 231

<212> DNA

<213> Homo sapiens

<400> 458

aggctctgggtt ccacccactt ccactccatc ctatctcttc taggactggg ctggggccaa 60
agaagagggg tggtaggga agccgtttag acctgtttag acctgtttag ccacccatata ctttccctca 120
acacccatcaac ctgggttaac agcatttggaa attatcattt gggatgtatc gatatttccaa 180
ggctctgggtt taggcattt gggggccaa accccaggaa aagaagatcc t 231

<210> 459

<211> 231

<212> DNA

<213> Homo sapiens

<400> 459

ggtagccaggat ctgcgtgaca cagaacaaacc ccaacgcggag gaaaggaaatg gcccggccaca 60
cccttgcggaa acctgtgggtt gcccacccat octaaacgggg caggacaggg agacagggaa 120
gcccgtcaactt tttttccctt caccacggcc acctctgttcc tcattgttcc tttttttttcc 180
actatacaca gtcacccgttcc caatggaaaa caaaggaggaa caccatccac a 231

<210> 460

<211> 231

<212> DNA

<213> Homo sapiens

<400> 460

gcaggatataa catgtctggaa caacagatgtt gacttagggaaac ggccgggttac atgggggggg 60
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ccacccatcaaa caacacggaa cggccggatc ggacccatcaaa gaaagggttccctt ctgtcggccaa 180
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<213> *Homo sapiens*

<400> 466

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ggcttccggaa cagaacctgc cccatcccca ggtatataatg ttttatccat ttggccaggaa 120
cctgttcaat ccaatatggc gggatattcc tcatgttgggg aagtcacaaat gactatggcc 180
atatgttgggg accatgttccca caagatgttcc accatgttccat ttgttccgggtt t 231

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2102 457

213 311

<212> DNA

<213> Romeo sapiens

5600 667

<210> 468

<233> 3332

<212> DNA

<213> *Homo sapiens*

<400> 468

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 ttgttccatc tagtttaatgtt aaagaaatgtt gggcaatcatc tgagccatc ttgttataatgtt 3060
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<210> 469

<211> 2229

<212> DNA

<213> Homo sapiens

<400> 469

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 aatgttgcatttcaatc ttatgttgc ttttgcatttcaatc ttatgttgc ttttgcatttcaatc 1620
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<210> 470

<211> 2426

<232> DNA

<213> Homo sapiens

A4000 470

<230> 471

<211> 812
 <212> DNA
 <213> Homo sapiens

<400> 471
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 <213> Homo sapiens

<220>
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 <212> DNA
 <213> Homo sapiens

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<231> 1594

<212> DNA

<213> *Homo sapiens*

<400> 474

<210> 475
<211> 2414
<212> DNA
<213> *Homo sapiens*

<220>
<221> unsure
<222> (33)
<223> n=A, T, C or G

<210> 476

<211> 3434

<212> DNA

<213> Homo sapiens

<400> 476

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<210> 477
<211> 140
<212> PRT
<213> Homo sapiens

<400> 477
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His Tyr His Arg Asp Thr Asp Thr Arg Arg His His His Met Asp Thr
26 25 30

Leu Ser His Tyr His Arg Asp Thr Arg His His Thr Val Thr Trp Thr
35 40 45

His His His Thr His Glu His Thr Asp Thr Lys Pro Tyr Gly His Trp
 50 55 60

His Thr His Cys His Thr Val Thr Trp Thr His Leu His Thr Ile Thr
65 70 75 80

Pro Pro His Thr Leu Pro Val Asp Thr Arg Thr His Arg His Cys His
85 90 95

Thr Asp Thr Gin Asn Thr Val Thr Arg Arg His His His Ala Asp Thr
100 109 110

Pro Pro Leu Trp Cys Arg Leu Asn Tyr Pro Ala Gly Gly Thr Ala Val
115 120 125

Ala Tyr Ser Cys Leu Ser Asp Trp Leu Ser Pro Gln
130 135 140

<210> 478
<211> 143
<212> PRT
<213> *Homo sapiens*

<400> 478
Met Tyr Arg His Thr Glu Thr Leu Pro His Gly Asp Thr Val Thr Gln
S 10 15

Ser His Gly His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr
 20 25 30

Gly Glu Ile Thr Trp Thr His His His Thr Ile Thr Gly Thr Gln Thr
35 40 45

Ris Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr

50	55	60
Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr		
65 70	75	80
Pro Thr His Cys His Met Asp Thr Gly Thr His Thr Ala Thr Leu Ser		
85 90	95	
His Gly His Thr Ser Thr Pro Ser His His His Thr His Cys Leu Trp		
100 105	110	
Thr Gln Gly His Thr Asp Thr Val Thr Gln Ile His Lys Thr Leu Ser		
115 120	125	
His Gly Asp Ile Thr Met Gln Ile His His His Ser Gly Ala Val		
130 135	140	

<210> 479

<211> 222

<212> PRT

<213> Homo sapiens

<400> 479

Met Tyr Arg His Thr Glu Thr Leu Pro His Gly Asp Thr Val Thr Gln		
5	10	15

Ser His Glu His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr		
20	25	30

Gly Glu Ile Thr Leu Thr His His His Thr Ile Thr Gly Thr Gln Thr		
35	40	45

His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr		
50	55	60

Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr		
65 70	75	80

Pro Thr His Cys His Met Asp Thr Ala Thr His Thr Ala Thr Leu Ser		
85 90	95	

His Gly His Thr Ser Ile Pro Ser His His His Thr His Cys His Val		
100	105	110

Asp Thr Arg Thr His Arg His Cys His Thr Asp Thr Gln Asn Thr Val		
115 120	125	

Thr Arg Arg His His His Asp Thr Pro Pro His Gly His Ser Thr		
130 135	140	

Arg His Ser Ala Thr Gln Ile His His His Thr Glu Met Arg Thr His		
145 150	155	160

Cys His Thr Asp Thr Thr Ser Leu Pro His Phe His Val Ser Ala		
165 170	175	

Gly Gly Val Gly Pro Thr Thr Leu Gly Ser Asn Arg Glu Ile Thr Trp		
---	--	--

180	185	190
Thr Tyr Ser Glu Gly Lys Ile Phe Phe Tyr Phe Leu Gly Asn Gln Ala		
195	200	205

Arg Leu Cys Leu Lys Lys Arg Lys Lys Lys Gln Tyr Thr Val		
210	215	220

<210> 480
<211> 144
<212> PRT
<213> Homo sapiens

<400> 480		
Met Glu Pro Tyr Arg Gly Asn Gln Gln Pro Ser Gln Gln Gln Gly Val		
5	10	15

Cys Cys Leu Trp Gly Leu Gln Ser Leu Pro Gln Gly Ser Tyr Val Thr		
20	25	30

Val Gly Phe Leu Val Val Lys Arg Gln Thr Ile Gly Arg Leu Glu Arg		
35	40	45

Asp Phe Met Phe Lys Cys Arg Lys Gln Pro Gly Leu Pro Pro Ser Gly		
50	55	60

Leu Cys Leu Leu Trp Pro Trp Pro Asn Leu Glu Phe Gly Arg Arg Gln		
65	70	75
80		

Asp Arg Leu Thr Trp Ser Ser Val Ser Val Ala Gly Val Cys Ala Cys		
85	90	95

Arg Ala Arg Pro Gly Trp Leu Gly Glu Gln Pro Ala Thr Ser Ala Gly		
100	105	110

Val Arg Leu Glu Gln Val Glu Gln Pro Pro Ala His Pro Leu Gln Glu		
115	120	125

Ala Gly Val Ala Arg Phe Pro Arg Pro Gln Trp Val Pro Pro Asn Gly		
130	135	140

<210> 481
<211> 167
<212> PRT
<213> Homo sapiens

<400> 481		
Met His Gly Pro Gln Val Leu Ala Arg Cys Ser Gln Cys Ala Cys Pro		
5	10	15

Ala Leu Ala Ala Thr Ser Ala Gly Val Arg Leu Glu Gly Val Asp Arg		
20	25	30

Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys Ser His Ser
 35 40 45

Leu Ser Gly Cys His Leu Met Ala Asp Gly Ala Lys Ala Leu Gly Lys
 50 55 60

Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr Asp Val Pro
 65 70 75 80

Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser Ser Trp Arg
 85 90 95

Ala Leu Ala Glu Val Thr Gly Cys Ser Leu Gly Pro Leu Gly Leu Ala
 100 105 110

Gln His Ala Gln Ala Ser Val Leu Leu Leu Cys Tyr Lys Trp Ser His
 115 120 125

Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr Ala Ala Phe
 130 135 140

Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu Trp Ala Ser
 145 150 155 160

Trp Leu Ser Arg Gly Arg Pro
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<210> 482

<211> 143

<212> PRF

<213> Homo sapiens

<400> 482

Met Glu Pro Tyr Arg Gly Asn Lys Lys Gln Val Gln Glu Lys Gly Val
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Pro Cys Leu Trp Gly Ser Ser Pro Cys Leu Arg Cys His Met Ala Leu
 20 25 30

Arg Ala Ser Trp Leu Pro Gly Gly Pro Gln Ala Ile Leu Gly Arg
 35 40 45

Thr Leu Cys Ser Ser Ala Glu Ser Ser Gln Asp Cys His Pro Gly Gly
 50 55 60

Pro Ser Ile Ala Leu Ala Lys Pro Cys Arg Gly Val Trp Leu Leu Phe
 65 70 75 80

Glu Pro Ala Trp Pro Pro Trp His Ala Arg Ala Pro Gly Ala Gly Thr
 85 90 95

Leu Leu Arg Val Cys Leu Ser Cys Leu Gly Cys His Leu Cys Gly Gly
 100 105 110

Ala Ser Gly Gly Gly Pro Ala Thr Asn Leu Thr Gln Ser Arg Lys
 115 120 125

Trp Met Ala Met Phe Pro Gln Pro Glu Trp Leu Pro Pro Asp Gly
 130 135 140

<210> 483
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 483
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 5 10 15

Cys Cys Leu Trp Gly Ser Ser Pro Cys Leu Gly Ser Tyr Gly Thr Ala
 20 25 30

Gly Phe Leu Val Ala Lys Arg Arg Thr Thr Gly Leu Leu Glu Glu Asp
 35 40 45

Phe Thr Phe Lys Cys Arg Lys Gln Pro Lys Leu Pro Ser Met Arg Leu
 50 55 60

Ser Leu Leu Trp Pro Trp Arg Asp Leu Lys Phe Val Pro Arg Gln Asp
 65 70 75 80

Lys Leu Thr Arg Ser Ser Val Ser Val Ala Gly Ala Tyr Ala Cys Arg
 65 90 95

Ala Gly Pro Gly Trp Leu Lys Gln Pro Ala Thr Ser Ala Arg Val
 100 105 110

Arg Leu Val Gln Ala Glu His Pro Pro Pro His Pro Leu Glu Glu Val
 115 120 125

Gly Met Ala Arg Phe Pro Gln Pro Glu Cys Leu Pro Pro Tyr Cys
 130 135 140

<210> 484
 <211> 30
 <212> PRT
 <213> Homo Sapien

<400> 484
 Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
 1 5 10 15
 Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
 20 25 30

<210> 485
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 485
 gggaaaccttta tcacccatgt ggccgcctctgt c

<210> 486
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 486
gcgaaattctc acgctgagta tttggcc 27

<210> 487
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 487
ccogaatttot tagctgcacca tcggaaatccc ttccatc 36

<210> 488
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 488
gggaagatcc ttcccccggtt gcaaccagctg tgc 33

<210> 489
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 489
Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
1 5 10 15
Ser Val Ala

<210> 490
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 490
Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala Thr Cys

1	5	10	15
Leu Ser His Ser			
20			
<210> 491			
<211> 20			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> Made in a lab			
<400> 491			
Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu	1	5	10
Thx Gly Phe Thr			15
20			
<210> 492			
<211> 20			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> Made in a lab			
<400> 492			
Ala Leu Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr	1	5	10
Leu Ala Ser Leu			15
20			
<210> 493			
<211> 20			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> Made in a lab			
<400> 493			
Tyr Thr Leu Ala Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro	1	5	10
Lys Tyr Arg Gly			15
20			
<210> 494			
<211> 20			
<212> PRT			
<213> Artificial Sequence			
<220>			
<223> Made in a lab			
<400> 494			
Leu Pro Lys Tyr Arg Gly Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser	1	5	10
Leu Met Ile Ser			15

20

<210> 495
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 495
Asp Ser Leu Met Thr Ser Phe Leu Pro Gly Pro Lys Pro Gly Ala Pro
1 5 10 15
Phe Pro Asn Gly
20

<210> 496
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 496
Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
1 5 10 15
Pro Pro Pro Pro Ala
20

<210> 497
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 497
Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val
1 5 10 15
Ser Val Arg Val
20

<210> 498
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 498
Asp Val Ser Val Arg Val Val Val Gly Glu Pro Thr Glu Ala Arg Val
1 5 10 15
Val Pro Gly Arg
20

<210> 499
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 499
Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
1 5 10 15
Ser Ala Phe Leu
20

<210> 500
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 500
Leu Asp Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met
1 5 10 15
Gly Ser Ile Val
20

<210> 501
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 501
Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met
1 5 10 15
Val Ser Ala Ala
20

<210> 502
<211> 414
<212> DNA
<213> Homo Sapiens

<220>
<221> misc_feature
<222> (1)...(414)
<223> n=A,T,C or G

<400> 502
caccatggag acggccgtgc gctgggtttt cctggtgctgt gtgctccaaag ggttccaaatg 60
tcgttcgttg gagggatccg ggggttcgtct gggtacccgtt gggacacccctt tgacantcact 120
ctgttaggtt ttggaaatng accttcgttagt caatgtcaatg agctgggttcg gctcaggatcc 180
agggaaagggtt ctggaaatggta toggagccat tgatataattgt ccacantcaag cgacatggggc 240

gaaaaggccga ttatnattt ccaaaacccn gaccacgggt gatitggaaa tgacmaggcc	308
gacacccggc gacacggccca cctatttttg tggcagatgg aatactggta atatgggtkg	360
gaaaatatt tggggccacag gacccctggt caccgtntcc tcagggcaac ctaa	414

<210> 503
 <211> 379
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(379)
 <223> n=A,T,C or G

<400> 503	
atacgttgtt gcttggtccaa aggtgtccag tgcgtgtccgg tggaggagtc cgggggtcgc	66
ctggtaacgc ctgggacacc cctgacactc acotgcaccc tntctggatt ngacatcaqt	120
agctatggc tgatgtgggt cccggcagggt ccagggaagg ggctggnata cctcggtatca	180
ttagttagt tagttacatit taaaggatggcaggat gggcggaaagg cogatccacc atttccaaaa	240
ccttngaccac ggtggatgtt aaatccaccc gtttgacaccc egaggacacg gcaacccattt	300
tntgtgcacag aggggggtt aatttataaag acatttgggg cccaggcacc ctggtcacccg	360
tntctttaagg gcaacccat	379

<210> 504
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 504	
Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp Ser Pro Tyr Phe Lys Glu	
1 5 10 15	
Asn Ser Ala	

<210> 505
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 505	
Lys Glu Asn Ser Ala The Pro Pro Phe Cys Cys Asn Asp Asn Val Thr	
1 5 10 15	
Asn Thr Ala Asn	
20	

<210> 506
 <211> 407
 <212> DNA
 <213> Homo Sapien

<400> 506

<210> 507
<211> 422
<212> DNA
<213> *Homo Sapiens*

<210> 508
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...{411}
<223> nsh,T,C or S

<210> 509
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<210> 510
<211> 15
<212> PRT
<213> *bioRxiv preprint doi: https://doi.org/10.1101/2021.05.10.443810; this version posted May 11, 2021. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under a [CC-BY-ND 4.0 International license](https://creativecommons.org/licenses/by-nd/4.0/).*

<220>
<223> Made in a lab

<400> 510
Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile
1 5 10 15

<210> 511
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 511

Tyr His Pro Ser Met Phe Cys Ala Gly Gly Gly Gln Asp Gln Lys
1 5 10 15

<210> 512
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 512
Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu
1 5 10 15

<210> 513
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 513
Ala Pro Cys Gly Gln Val Gly Val Pro Asx Val Tyr Thr Asn Leu
1 5 10 15

<210> 514
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 514
Leu Cys Lys Phe Thr Gln Trp Ile Glu Lys Thr Val Gln Ala Ser
1 5 10 15

<210> 515

<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 515
Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg
1 5 10 15

<210> 516
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 516
Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln
1 5 10 15

<210> 517
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 517
Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met
1 5 10 15

<210> 518
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 518
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
1 5 10 15

<210> 519
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 519
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg Asn Tyr Asp Glu Gly Cys
1 5 10 15

Gly

<210> 520
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 520
Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr
1 5 10 15
Glu Ala Arg Arg His Tyr Asp Glu Gly
20 25

<210> 521
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 521
Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
1 5 10 15
Pro Pro Pro Pro Ala
20

<210> 522
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 522
Leu Leu Val Val Pro Ala Ile Lys Lys Asp Tyr Gly Ser Gln Glu Asp
1 5 10 15
Phe Thr Gln Val
20

<210> 523
<211> 254
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<220>
<221> VARIANT
<222> (1)...(254)
<223> Xaa = any amino acid

<400> 523
 Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
 1 8 10 15
 Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
 20 25 30
 Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
 35 40 45
 Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
 50 55 60
 Trp Val Leu Ser Ala Thr His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
 65 70 75 80
 Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
 85 90 95
 Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
 100 105 110
 Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Gln Ser Val Ser Glu
 115 120 125
 Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
 130 135 140
 Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
 145 150 155 160
 Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
 165 170 175
 Val Cys Ser Lys Leu Tyr Asp Pro Ile Tyr His Pro Ser Met Phe Cys
 180 185 190
 Ala Gly Gly Gly Gln Kaa Gln Kaa Asp Ser Cys Asn Gly Asp Ser Gly
 195 200 205
 Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
 210 215 220
 Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
 225 230 235 240
 Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
 245 250

<210> 524

<211> 765

<212> DNA

<213> Homo sapien

<400> 524
 atggccacatcg cggaaatctc ctggggctgtg ttctctgggtt accttcatctt tgggtgtcgca
 ggatcgatcg tcttcgttgcgt ctgcagtcas aatctaaacgc gggaggactcg cagcccgac
 tggatgcgtt ggcaggccggc actgtgtatcg gaaaaacgtat tggttctgttc ggggtgtctcg
 gtgcgtatcgatc ggtgggttgcgt gtccagccgcgca cactgttttcg acaacttcgta caccatcgagg
 ctggggcttcg acatgttttcg gycgcacccaa gggccagggtt gcaatgtgtt gggaggccgc
 ctcttcgttgc ggcaccccaaga gtacacacggc cccttgtgttcg cttaacgacatc catgttcatc
 aatgtggaaatc aatccgtgttcg cggatgttcg acatccgtggc gatccatgtt tgcgttcggcg
 tggccatcccg cggggaaactc ttggcttcgtt ttcgtgttgcgtt gtcgtgttgc gaaacggcaga
 atgcgtatcccg tgcgtgttcgtt cgtgtgttcgtt tccgtgttgcgtt ctgggggggtt ctgcgtatcg
 ctctatgtatcccg cgtgttgcgtt ccccaatgtt ttcttgcgttgc ggggggggtt ggggggggtt
 gactctgttcg acgggtgttcg tggggggccgc ctgtatgttcg aatgggtatccgtt ggggggtt
 gtgttgcgttgcg gaaaatgttcg tgcgtgttcgtt ggggggggtt cgggtgttcg caccatccgtt
 tgcgtatcccg tgcgtgttgcgtt agatggaaatccgtt gtcgtgttcgtt gttaa

<210> 525

<211> 254

<212> PRT

<213> Homo sapien

<400> 525
 Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
 1 5 18 15
 Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
 20 25 30
 Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
 35 40 45
 Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
 50 55 60
 Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
 65 70 75 80
 Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
 85 90 95
 Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
 100 105 110
 Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
 115 120 125
 Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
 130 135 140
 Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
 145 150 155 160
 Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
 165 170 175
 Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
 180 185 190
 Ala Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly
 195 200 205
 Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
 210 215 220
 Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
 225 230 235 240
 Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
 245 250

<210> S26

<213> 963

<212> DNA

<213> *Homo sapiens*

<400> 526

<210> 527
 <211> 329
 <212> PRT
 <213> Homo sapiens

 <400> 527
 Met Ser Ser Cys Asn Phe Thr His Ala Thr Phe Val Leu Ile Gly Ile
 5 10 15
 Pro Gly Leu Glu Lys Ala His Phe Trp Val Gly Phe Pro Leu Leu Ser
 20 25 30
 Met Tyr Val Val Ala Met Phe Gly Asn Cys Ile Val Val Phe Ile Val
 35 40 45
 Arg Thr Glu Arg Ser Leu His Ala Pro Met Tyr Leu Phe Leu Cys Met
 50 55 60
 Leu Ala Ala Ile Asp Leu Ala Leu Ser Thr Ser Thr Met Pro Lys Ile
 65 70 75 80
 Leu Ala Leu Phe Trp Phe Asp Ser Arg Glu Ile Ser Phe Glu Ala Cys
 85 90 95
 Leu Thr Gln Met Phe Phe Ile His Ala Leu Ser Ala Ile Glu Ser Thr
 100 105 110
 Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro
 115 120 125
 Leu Arg His Ala Ala Val Leu Asn Asn Thr Val Thr Ala Gln Ile Gly
 130 135 140
 Ile Val Ala Val Val Arg Gly Ser Leu Phe Phe Phe Pro Leu Pro Leu
 145 150 155 160
 Leu Ile Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His Ser
 165 170 175
 Tyr Cys Val His Gln Asp Val Met Lys Leu Ala Tyr Ala Asp Thr Leu
 180 185 190
 Pro Asn Val Val Tyr Gly Leu Thr Ala Ile Leu Leu Val Met Gly Val
 195 200 205
 Asp Val Met Phe Ile Ser Leu Ser Tyr Phe Leu Ile Ile Arg Thr Val
 210 215 220
 Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys Ala Phe Gly Thr Cys
 225 230 235 240
 Val Ser His Ile Gly Val Val Leu Ala Phe Tyr Val Pro Leu Ile Gly
 245 250 255
 Leu Ser Val Val His Arg Phe Gly Asn Ser Leu His Pro Ile Val Arg
 260 265 270

Val Val Met Gly Asp Ile Tyr Leu Leu Leu Pro Pro Val Ile Asn Pro
275 280 285

Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg Val Leu Ala
290 295 300

Met Phe Lys Ile Ser Cys Asp Lys Asp Leu Gln Ala Val Gly Gly Lys
 305 310 315 320

<210> 528

<211> 20

<212> DNA

<213> Homo Sapiens

<400> 528

actatggtoc agaaggatgt

<210> 529

<211> 20

<212> DNA

<213> Homo Sapiens

<400> 529

atccacctatc tggccgttct

42102 530

223

<212> DNA

<213> *Homo sapiens*

<400> 530

tttctgacta csaagaaaaa cagatgttaa aaatcttcc tgaacacgc aatccagaad 1680
 aagacttaaa gotgacatcc gaggaaagggt cacaagggt taaaagggt gaaaacagcc 1740
 agccagactg aagaaggattna tggctattgt aqaagaatgt aeaacacgga aytactcatg 1800
 tgggattcc agaaaacactg actaacgggtc cggctgttgg caatgggtat ga 1852

<210> 531
 <211> 879
 <212> DNA
 <213> Homo sapiens

<400> 531
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 aacgtggcgc ctttctggaga ccacaaacgc tcccttgcgttgg aagcccttgg gagccaaagg 120
 tggaaatgtt gatgtccatgtt ctcccccgttggccatggcggccatggcggccatggc 180
 gtttggggatc actacatgtt cagccgcctt atggatccca gtttccatggatgttccatggatgg 240
 gatctgttggatc agtccatccatgttggggatgttggccatggccatggccatggccatggccatgg 300
 gtcatgttgc gggccatggcggccatggccatggccatggccatggccatggccatggccatggccatgg 360
 ctggccatgtt ccatggccatggccatggccatggccatggccatggccatggccatggccatggccatgg 420
 cttaaatgtt ttggccatggccatggccatggccatggccatggccatggccatggccatggccatgg 480
 gatgtatgtt gtttccatggccatggccatggccatggccatggccatggccatggccatggccatgg 540
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 ctccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatgg 660
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 aatgttccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatgg 780
 aatgttccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatgg 840
 ogggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatggccatgg 879

<210> 532
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 532
 Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
 5 10 15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
 20 25 30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe
 35 40 45

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp
 50 55 60

Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
 65 70 75 80

Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg
 85 90 95

Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
 100 105 110

Lys Glc Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser
 115 120 125

Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu

<210> 534
<211> 266
<212> PRT
<213> Homo sapiens

<600> 534
 Met Tyr Lys Leu Gln Cys Asn Asn Cys Ala Thr Asn Gly Ala Thr Glu
 5 10 15
 Arg Lys Gln Ala Ala Gly Ser Gly Ala Gly Tyr Ala Leu Pro Ser Ala
 20 25 30
 Leu Gln Ser Met Pro Gln Gly Ser Tyr Ala Thr Ala Arg Phe Leu Val
 35 40 45
 Ala Lys Arg Pro Thr Thr Gly His Leu Glu Lys Glu Phe Met Phe His
 50 55 60
 Cys Arg Lys Gln Pro Gly Ser Pro Ser Arg Gly Leu Gly Leu Leu Trp
 65 70 75 80
 Pro Trp Pro Asp Ile Glu Phe Val Pro Arg Gln Asp Lys Leu Thr Gln
 85 90 95
 Ser Ser Val Leu Val Pro Gln Ile Cys Ala Cys Gln Thr Arg Pro Asn
 100 105 110
 Trp Leu Asn Glu Gln Pro Ala Thr Ser Ala Gly Val Arg Leu Glu Glu
 115 120 125
 Val Asp Gln Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys
 130 135 140
 Ser His Ser Leu Ser Gly Cys His Leu Met Ala Asp Ile Ala Lys Ala
 145 150 155 160
 Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr
 165 170 175
 Asp Val Pro Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser
 180 185 190
 Ser Trp His Thr Leu Ala Glu Val Thr Gly Cys Ser Leu Ser Pro Leu
 195 200 205
 Ser Leu Ala Gln His Ala Gln Ala Ser Val Leu Leu Leu Cys Tyr Lys
 210 215 220
 Trp Ser His Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr
 225 230 235 240
 Ala Ala Phe Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu
 245 250 255
 Trp Ala Ser Trp Leu Pro Arg Gly Arg Pro
 260 265

<210> 535
<211> 6092
<212> DNA
<213> *Homo sapiens*

<400> 535

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 ggattgatata gatcttgcac actgaaattt gacttcacga tttaaaggaaat cttatgtccaa 3540
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 atgacgacacat ggatggggaa ctgtggaaatg ctttacaaaga gttacaactt aaagaaaaacca 3660
 ttggaaatctt tttttttttt atggatactt aatggaaatg atcaggatoc aatttttatgt 3720
 ttggacaaag acaactgggt tgcccttgcac gggcaattct caggaaaaatc cagatattgt 3780
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 ccggggaaat tttgcocact gcaacgtgtc aacccatgtca cacaatgtca cacccattat 3900
 tgcaagcggaa aagataatgg tttttatgtt agggaaactgtt aagaaatgtt atggcccgta 3960
 tttttttgtt cttttttttt aatggatctt ttacaatggt gttcaacac gggccaaaggc 4020
 aagggccgtt gttttttttt aatggatctt aacggatatac ttccaaatggaa attatccaca 4080
 tttttttttt actggatccaa tggtttccaa cttttttttt ggcacccctt ccacccat 4140
 tttttttttt aatggatctt aatggatctt gttttttttt gttttttttt aagggatctt 4200
 ccactatgtt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 4260
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Ile Gly His Lys Arg Arg Leu Glu Glu Asp Asp Met Tyr Ser Val Leu
 35 40 45

Pro Glu Asp Arg Ser Gln His Leu Gly Glu Glu Leu Gln Gly Phe Trp
 50 55 60

Asp Lys Glu Val Leu Arg Ala Glu Asn Asp Ala Gln Lys Pro Ser Leu
 65 70 75 80

Thr Arg Ala Ile Ile Lys Cys Tyr Trp Lys Ser Tyr Leu Val Leu Gly
 85 90 95

Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val Ile Gln Pro Ile Phe
 100 105 110

Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr Asp Pro Met Asp Ser
 115 120 125

Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr Val Leu Thr Phe Cys
 130 135 140

Thr Leu Ile Leu Ala Ile Leu His Leu Tyr Phe Tyr His Val Gln
 145 150 155 160

Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys His Met Ile Tyr Arg
 165 170 175

Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly Lys Thr Thr Thr Gly
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Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn Lys Phe Asp Gln Val
 195 200 205

Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro Leu Gln Ala Ile Ala
 210 215 220

Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile Ser Cys Leu Ala Gly
 225 230 235 240

Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln Ser Cys Phe Gly Lys
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Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr Phe Thr Asp Ala Arg
 260 265 270

Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile Arg Ile Ile Lys Met
 275 280 285

Tyr Ala Trp Gln Lys Ser Phe Ser Asn Leu Ile Thr Asn Leu Arg Lys
 290 295 300

Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys Leu Arg Gly Met Asn
 305 310 315 320

Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile Val Phe Val Thr Phe
 325 330 335

Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr Ala Ser Arg Val Phe

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Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg		
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Gln Leu Pro Ser Asp Gly Lys Met Val His Val Gln Asp Phe Thr		
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Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gln Leu Ser		
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Ser His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln		
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Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly		
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Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala		
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Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile		
515	520	525
Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn		
530	535	540
Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asn		
545	550	555
Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu		
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Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His		
580	585	590
Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp		
595	600	605
Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly		
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Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu		
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 Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val Thr Val Asn Gly Gly
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 770 775 780
 Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln Thr Leu His Asn Lys
 785 790 795 800
 Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu Phe Phe Asp Arg Asn
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 Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe Ile Gln Thr Leu Leu
 835 840 845
 Gln Val Val Gly Val Val Ser Val Ala Val Ile Pro Trp Ile
 850 855 860
 Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe Ile Phe Leu Arg Arg
 865 870 875 880
 Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg Leu Glu Ser Thr Thr
 885 890 895
 Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser Leu Gln Gly Leu Trp
 900 905 910
 Thr Ile Arg Ala Tyr Lys Ala Gln Glu Arg Cys Gln Glu Leu Phe Asp
 915 920 925
 Ala His Gln Asp Leu His Ser Gln Ala Trp Phe Leu Phe Leu Thr Thr
 930 935 940
 Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile Cys Ala Met Phe Val
 945 950 955 960

Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala Lys Thr Leu Asp Ala
 965 970 975
 Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu Thr Leu Met Gly Met
 980 985 990
 Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val Glu Asn Met Met Ile
 995 1000 1005
 Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu Glu Lys Glu Ala Pro
 1010 1015 1020
 Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp Pro His Glu Gly Val
 1025 1030 1035 1040
 Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser Pro Gly Gly Pro Leu
 1045 1050 1055
 Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser Gln Glu Lys Val Gly
 1060 1065 1070
 Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser Leu Ile Ser Ala Leu
 1075 1080 1085
 Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp Ile Asp Lys Ile Leu
 1090 1095 1100
 Thr Ile Ser Ile Gly Leu His Asp Leu Arg Lys Lys Met Ser Ile Ile
 1105 1110 1115 1120
 Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met Arg Lys Asn Leu Asp
 1125 1130 1135
 Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp Asn Ala Leu Gln Glu
 1140 1145 1150
 Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro Gly Lys Met Asp Thr
 1155 1160 1165
 Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val Gly Gln Arg Gln Leu
 1170 1175 1180
 Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn Gln Ile Leu Ile Ile
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Tyr Leu Val Leu Gly Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val			
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Ile Gln Pro Ile Phe Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr			
65	70	75	80
Asp Pro Met Asp Ser Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr			
85	90	95	
Val Leu Thr Phe Cys Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr			
100	105	110	
Phe Tyr His Val Gln Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys			
115	120	125	
His Met Ile Tyr Arg Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly			
130	135	140	
Lys Thr Thr Thr Gly Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn			
145	150	155	160
Lys Phe Asp Gln Val Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro			
165	170	175	
Leu Gln Ala Ile Ala Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile			
180	185	190	
Ser Cys Leu Ala Gly Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln			
195	200	205	
Ser Cys Phe Gly Lys Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr			
210	215	220	
Phe Thr Asp Ala Arg Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile			
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Arg Ile Ile Lys Met Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile			
245	250	255	
Thr Asn Leu Arg Lys Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys			
260	265	270	
Leu Arg Gly Met Asn Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile			
275	280	285	
Val Phe Val Thr Phe Thr Tyr Val Leu Leu Gly Ser Val Ile Thr			
290	295	300	
Ala Ser Arg Val Phe Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu			
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 Ile Val Ser Ile Arg Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile
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 Ser Gln Arg Asn Arg Gln Leu Pro Ser Asp Gly Lys Lys Met Val His
 355 360 365
 Val Gln Asp Phe Thr Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr
 370 375 380
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 385 390 395 400
 Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu
 405 410 415
 Gly Gln Leu Ala Pro Ser His Gly Leu Val Ser Val His Gly Arg Ile
 420 425 430
 Ala Tyr Val Ser Gln Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser
 435 440 445
 Asn Ile Leu Phe Gly Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val
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 465 470 475 480
 Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln
 485 490 495
 Lys Ala Arg Val Asn Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile
 500 505 510
 Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg
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 His Leu Phe Glu Leu Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr
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 545 550 555 560
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 565 570 575
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 Glu Gln Ser Glu Gln Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn
 595 600 605
 Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro
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Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro
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 Val Thr Leu Ser Glu Glu Asn Arg Ser Gln Gly Lys Val Gly Phe Gln
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 Gln Glu Leu Phe Asp Ala His Gln Asp Leu His Ser Glu Ala Trp Phe
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 Lys Thr Leu Asp Ala Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu

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Glu Lys Glu Ala Pro Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp		
980	985	990
Pro His Glu Gly Val Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser		
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Pro Gly Gly Pro Leu Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser		
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Gln Glu Lys Val Gly Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser		
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Ile Ile Ser Ala Leu Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp		
1045	1050	1055
Ile Asp Lys Ile Leu Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys		
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Lys Met Ser Ile Ile Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met		
1075	1080	1085
Arg Lys Asn Leu Asp Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp		
1090	1095	1100
Asn Ala Leu Gln Glu Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro		
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Gly Lys Met Asp Thr Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val		
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Gly Gln Arg Gln Leu Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn		
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Gln Ile Leu Ile Ile Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr		
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Asp Glu Leu Ile Gln Lys Lys Ile Arg Glu Lys Phe Ala His Cys Thr		
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Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys		
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Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr		
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